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EXAMINER

BEYEN, ZEWDU A

ART UNIT

PAPER NUMBER

2461

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/572,818	<b>Applicant(s)</b> BICHOT ET AL.	
	<b>Examiner</b> ZEWDU BEYEN	<b>Art Unit</b> 2461	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 is/are allowed.
- 6) ☒ Claim(s) 6-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

**Response to Amendment**

- This action is responsive to amendment dated 06/17/2010.
- Applicant's amendments filed on 06/17/2010 has been entered and considered.
- Claims 18 and 27, are amended.
- Claims 29-34, are canceled.
- Claims 1-28 are pending.
- Claims 6-24, 27-28 stand rejected.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Independent claims 13, and 18, recite "means for executing a certain function" limitations; however, there is no structural support for the claims in the applicant's disclosure.

***Claim Rejections - 35 USC § 103***

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 6,8,18, 20 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrel to(US7269182), in view of Eyuboglu to (US20030026240)

**Regarding claims 6, 18 and 27** Carrel teaches a method for receiving a multicast transmission in

user devices in a network, the method comprising: establishing a unicast session between said an intermediate device and a dedicated terminal ( **FIG.2 col.1 lines 51-55 discloses**

**At block 202, a PPPoE unicast session is established between the access concentrator 111 and the host 101)**

identifying multicast data packets associated with said a multicast group(**fig.2 col.1 lines**

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**55- 57 discloses At block 203, the host 101 receives notification of an Internet Protocol (IP) multicast channel. Thus, inherently identify the packet associated with the channel)**

processing said multicast data packets by said dedicated terminal(**col.2 lines 3-5 discloses At block 219, the host 101 processes the multicast packet).**

Carrel does not explicitly teach monitoring transmissions of said multicast data packets between said intermediate device and said dedicated terminal by said user devices

However, Eyuboglu teaches monitoring transmissions of said multicast data packets between said intermediate device and said dedicated terminal by said user devices([0033] **discloses In terminal-initiated broadcast/multicast applications, a broadcast/multicast session is initiated by the Access Terminal. This triggers a transition to the Monitor State where the AT will remain for the duration of the broadcast/multicast session).**

Therefore it would have been obvious to one ordinarily skilled in the art at the time the invention was made to enable the system of Carrel monitoring transmissions of said multicast data packets between said intermediate device and said dedicated terminal by said user devices, as suggested by, Eyuboglu. This modification would benefit the system to efficiently process transmitted packets.

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**Regarding claims 8, and 20** Carrel teaches wherein said transmission of multicast/broadcast data packets occurs in one of a wireless local area network, a cable network and a 3G cellular network that supports broadcast services(see fig.1).

4. Claims 7, 10-12, 19, 22-24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrel to(US7269182), in view of Eyuboglu to (US20030026240), **and further in view of** Khan to (20020143951),

Regarding claims 7, 19, and 28 Carrel does not explicitly teach testing to determine if a wake-up message is received from said dedicated terminal;  
performing one of continuing to receive multicast data packets via said already established unicast session and selecting another dedicated terminal by said intermediate device with which said intermediate device establishes a new unicast session

However, Khan teaches testing to determine if a wake-up message is received from said dedicated terminal (**Khan, [0033] discloses a unicast client may leave a multicast group by failing to respond to a multicast group query either initiated by a router or initiated by an agent. The agent poll or query its attached clients (i.e., the unicast clients for whom the agent has been designated to provide multicast service))** performing one of continuing to receive multicast data packets via said already established unicast session (**Khan, [0030] discloses unicast client join a multicast group by sending a special "unicast join" control message 505 to a source server. In**

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**addition, the abstract discloses the agents repackage the multicast information into a unicast data packet and forward the unicast data packet to a client registered with the agent)** and selecting another dedicated terminal by said intermediate device with which said intermediate device establishes a new unicast session **(Khan, [0033] discloses If an attached unicast client does not respond to the agent's query message, the agent may stop forwarding multicast packets to the client( then continue to forward for unicast clients that are responsive). The agent also poll or send a query to its attached unicast clients to determine which multicast groups the agent needs to belong to and to whom the agent needs to forward information from those multicast groups)**

Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to enable the system of Carrel testing to determine if a wake-up message is received from said dedicated terminal;performing one of continuing to receive multicast data packets via said already established unicast session and selecting another dedicated terminal by said intermediate device with which said intermediate device establishes a new unicast session, as suggested by Khan. This modification would benefit the system to efficiently process the multicast packet.

Regarding claims 10 and 22, Carrel does not explicitly teach a plurality of unicast sessions are established in order to support multiple transmission rates

However, Khan teaches wherein a plurality of unicast sessions are established in order to support multiple transmission rates **(Khan, fig.4 discloses plurality of unicast sessions)**

Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to enable the system of Carrel include a plurality of unicast sessions are established in order to support multiple transmission rates, as suggested by Khan. This modification would benefit the system to support multiple transmission at one time.

Regarding claims 11 and 23, Carrel does not explicitly teach wherein said plurality of unicast sessions are between said ID and a plurality of dedicated terminals

However, Khan teaches said plurality of unicast sessions are between said ID and a plurality of dedicated terminals(**Khan,fig.4 discloses plurality of unicast sessions**)

Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to enable the system of Carrel wherein said plurality of unicast sessions are between said ID and a plurality of dedicated terminals, as suggested by Khan. This modification would benefit the system to manage the transmission.

Regarding claims 12 and 24, Carrel does not explicitly teach wherein said intermediate device is a router

However, Khan teaches wherein said intermediate device is a router (**Khan, fig.2 discloses router that interconnect unicast clients with multicast group**)

Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to enable the system of Carrel include intermediate device is a router, as a design choice.



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7. Claims 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrel to(US7269182), in view of Khan to (20020143951) and further in view of Hardisty to (US20020141394)

Regarding claim 25, Carrel teaches identifying multicast data packets associated with said multicast group(fig.2 col.1 lines 55- 57 discloses At block 203, the host 101 receives notification of an Internet Protocol (IP) multicast channel. Thus, inherently identify the packet associated with the channel); monitoring transmissions of said multicast data packets (col.1 lines 57-58 discloses At block 205, the host 101 listens for traffic on the IP multicast channel, furthermore , FIG.2 col.1 lines 51-55 discloses At block 202, a PPPoE unicast session is established between the access concentrator 111 and the host 101. Thus , the host 101 only monitor the IP multicast channel after it already established unicast session with the access concentrator 111, so inherently there is an already established unicast session )

establishing a unicast session and processing multicast data packets if an already established unicast session does not exist(fig.2 col.1 50-52 discloses At block 201, the host 101 transmits a PPPoE active discovery request (PADR) to the access concentrator 111. Furthermore, col.2 lines 3-5 discloses At block 219, the host 101 processes the multicast packet)

Carrel does not explicitly teach issuing a request to join a multicast group; determine whether said identified multicast data packets are being transmitted in an already established unicast session

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However, Khan teaches issuing a request to join a multicast group (Khan, [0030] discloses unicast client join a multicast group by sending a special "unicast join" control message 505 to a source server)

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Carrel issuing a request to join a multicast group, as suggested by Khan. This modification would benefit the system to efficiently join a transmission group.

The combination of Carrel and Khan does not explicitly teach determine whether said identified multicast data packets are being transmitted in an already established unicast session

However, Hardisty teaches determine whether said identified multicast data packets are being transmitted in an already established unicast session ([0019] discloses determining whether a multicast session is established with the remote system and if it is established adding the address of the remote system to an address list of the multicast session but if it is not established determining whether to establish a multicast session or a unicast session as appropriate with the remote location and establishing a new multicast session and adding the address of the remote location to an address list of the new multicast session or establishing a unicast session as determined)

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of The combination of Carrel and Khan determine whether said identified multicast data packets are being transmitted in an

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already established unicast session, as suggested by Hardisty . This modification would benefit the system to efficiently establish a session.

Regarding claim 26, Carrel does not explicitly teach testing to determine if said already established unicast session is still active; and performing one of continuing to receive multicast data packets via said already established unicast session and establishing a new unicast session.

However, Khan teaches testing to determine if said already established unicast session is still active (**Khan, [0033] discloses a unicast client may leave a multicast group by failing to respond to a multicast group query either initiated by a router or initiated by an agent. The agent poll or query its attached clients (i.e., the unicast clients for whom the agent has been designated to provide multicast service))** performing one of continuing to receive multicast data packets via said already established unicast session and establishing a new unicast session (**Khan, [0030] discloses unicast client join a multicast group by sending a special "unicast join" control message 505 to a source server. In addition, the abstract discloses the agents repackage the multicast information into a unicast data packet and forward the unicast data packet to a client registered with the agent)**

Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to enable the system of Carrel testing to determine if said already established unicast session is still active; and performing one of continuing to

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receive multicast data packets via said already established unicast session and establishing a new unicast session, as suggested by Khan. This modification would benefit the system to efficiently process the multicast packet.

8. Claims 9, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrel to (US7269182), in view of Eyuboglu to (US20030026240), **further in view of** Chow to (20030053434)

**Regarding claims 9 and 21** Carrel does not explicitly teach wherein all user devices in said multicast group operate in monitor mode and said dedicated terminal operates in normal mode

However, Chow, teaches wherein all user devices in said multicast group operate in monitor mode and said dedicated terminal operates in normal mode ([0133], **fig.5 disclose the rest of the multicast group are in listen-mode while one of them on push-to-talk mode)**

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Carrel by wherein all user devices in said multicast group operate in monitor mode and said dedicated terminal operates in normal mode, as suggested by Chow. This modification would benefit the system by providing a technique to improve transmission quality.

*Allowable Subject Matter*

Claims 1-5 are allowed.

### **Response to Arguments**

Applicant's arguments with respect to claims 6-12 and 18-34, have been considered but are not persuasive. Regarding Applicant's argument with respect to claims 6,8,12,18,20, and 27 have been considered but are moot in view of new grounds of rejection(s).

Applicant's argues that neither Khan or Hardisty nor Carrel show or suggest "monitoring transmissions of said multicast data packets to determine whether said identified multicast data packets are being transmitted in an already established unicast session" . Examiner respectfully disagrees and Applicant reminded that claims are given the broadest interpretation. Hardisty clearly teaches determining if there is an already established session or not; Then if there is no an already established session it establishes an appropriate session( see claim 25 rejection).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZEWDU BEYEN whose telephone number is (571)270-7157. The examiner can normally be reached on Monday thru Friday, 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 1-571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. B./

Examiner, Art Unit 2461

/Jason E Mattis/

Primary Examiner, Art Unit 2461